



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,394	11/19/2003	Daryl Wayne Bradley	550-487	5468

23117 7590 09/06/2006

NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

EXAMINER

PUENTE, EMERSON C

ART UNIT PAPER NUMBER

2113

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/715,394	Applicant(s) BRADLEY ET AL.	
	Examiner Emerson C. Puente	Art Unit 2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/15/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is made **Non-Final**.

Claims 1-41 have been examined.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 41 is rejected under 35 U.S.C. 101 because claimed invention is directed to non-statutory subject matter. A computer program product, without the computer-readable medium needed to realize the computer program's functionality, constitutes nonstatutory subject matter. See MPEP § 2106. Examiner suggests amending "A computer program product ..." to "A computer program product stored on a computer readable medium ..." (see line 1 of claim).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-41 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 7,043,418 of Swoboda et al. referred hereinafter "Swoboda".

In regard to claim 1, Swoboda discloses an apparatus for processing data, said apparatus comprising:

a plurality of trace data sources operable to generate respective individual trace data streams carrying trace data. Swoboda discloses receiving conventional trace input information from a plurality of sources (see figure 2 and column 10 lines 37-40).

a trace data selector operable to select one of said individual trace data streams as a selected trace data stream for output. Swoboda discloses producing from the plurality of sources a sequence or stream of trace packets, which are outputted to suitable output pins (see figure 2 and column 2 lines 40-46).

a trace data formatter operable to format said selected trace data stream to form an output trace data stream, wherein said trace data formatter is operable to detect which of said individual trace data sources is selected by said trace data selector and to insert a trace data source identifier in said output trace data stream in response to a change of trace data source selected by said trace data selector. Swoboda discloses formatting into a stream of transmission packets which are output (see column 10 lines 44-46) and using 10 bit packets that include opcodes and/or data, wherein the opcode indicates the type of information that is being sent (see figure 2 and column 10 line 64 to column 11 line 1).

In regards to claim 2, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein said selected trace data stream includes a trace data source identifier with every packet of trace data (see column 10 line 67 to column 11 line 1).

In regards to claim 3, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein said trace data formatter is operable to insert said trace data source identifier at a predetermined source identifier position within said output trace data stream. Swoboda discloses wherein opcode could be between 2 and 10 bits long, indicating wherein each of the bits constitute a predetermined source identifier position (see figure 3 and column 10 line 67 to column 11 line 5).

In regards to claim 4, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein said predetermined source identifier position contains trace data when said trace data source identifier is not inserted. Swoboda discloses in packets containing less than 10 bit opcodes, the remaining bits can be used for data transmission (see figure 3 and column 11 lines 40-42).

In regards to claim 5, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein a flag at a predetermined flag position within said output trace data stream indicates whether said predetermined source identifier position contains: (i) said trace data source identifier; or (ii) trace data. Swoboda discloses different packet formats (see figure 3). From the figure, depending on whether certain bit positions, indicating a flag, are set to 1 or 0, other bit positions are identified as either a data source identifier or trace data. For instance, if either of the two left most bit positions is not set to zero, then the remaining bit positions are identified as trace data. If both of the bit positions are set to zero, then each of the next two bit positions are data source identifiers.

In regards to claim 6, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein when said predetermined source identifier position contains

Art Unit: 2113

said trace data source identifier, then a further predetermined position within said output trace data stream contains a position flag indicating where trace data for said trace data source identified by said trace data source identifier starts within said output trace data stream.

Swoboda discloses different packet formats (see figure 3). From the figure, depending on which bit positions, indicating a flag, are set to 1, one can determine where the trace data starts. For instance, if the fourth bit position from the left is part of the opcode, indicating said predetermined source identifier position contains said trace data source identifier, and the third bit position from the left, indicating a flag, is set to 1, trace data starts at the fifth bit position from the left.

In regards to claim 7, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein when said trace data source identifier is not inserted, said predetermined source identifier position contains trace data and said further predetermined position contains trace data. Swoboda discloses the remaining bits that are not part of the opcode can be used for data transmission (see figure 3 and column 11 lines 40-42). Thus, when the third and fourth bits positions are not part of the opcode, indicating said trace data source identifier is not inserted, the third and forth bit positions are trace data, indicating said predetermined source identifier position contains trace data and said further predetermined position contains trace data.

In regards to claim 8, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein said output trace data stream is formatted into data frames, each data frame comprising: a plurality of predetermined positions respectively containing one of: (i) a trace data source identifier; and (ii) trace data; and a plurality of predetermined positions containing trace data (see figure 3 and column 11 lines 37-42).

In regards to claim 9, Swoboda discloses the claim limitations as discussed above.

Swoboda further discloses wherein each data frame includes a flags portion containing at least one of: (i) one or more position flags indicating respective start positions of trace data within said frame associated with trace data source identifiers within said data frame; and (ii) trace data.

Swoboda discloses different packet formats (see figure 3). From the figure, depending on whether certain bit positions, indicating flag portion, are set to 1 or 0, one can determine where the trace data starts, indicating position flags indicating respective start positions of trace data within said frame associated with trace data source identifiers within said data frame. Swoboda also discloses the remaining bits that are not part of the opcode can be used for data transmission (see figure 3 and column 11 lines 40-42). Thus, when the flag portions is are not part of the opcode, the flag portion includes trace data.

In regards to claim 10, Swoboda discloses the claim limitations as discussed above.

Swoboda further discloses wherein said trace data formatter is operable to insert a trace data source identifier having a reserved synchronisation value as a synchronisation marker within said output trace data stream (see figure 5 and 6 and column 12 lines 24-26 and 46-49).

In regards to claim 11, Swoboda discloses the claim limitations as discussed above.

Swoboda further discloses wherein said trace data formatter is operable to insert a trace data source identifier having a reserved null value as a null value marker within said output trace data stream indicative of said output trace data stream containing null values (see figure 3 “no information” and column 19 lines 58-61).

In regards to claim 12, Swoboda discloses the claim limitations as discussed above.

Swoboda further discloses wherein said output trace data stream is directed from said trace data

Art Unit: 2113

formatter to one of: (i) one or more real time trace outputs of an integrated circuit; and (ii) a trace data buffer memory of an integrated circuit. Swoboda discloses transmitting the packet to a trace recorder (see figure 2 and column 10 lines 49-56).

In regards to claim 13, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein said trace data source identifier inserted in said output trace data stream by said trace data formatter comprises a reserved sequence that is distinguishable from any trace data sequences associated with said selected trace data stream in said output trace data stream. Swoboda discloses various packet formats, including reserved sequences (see figure 3 and column 11 lines 31-42).

In regards to claim 14, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein said trace data formatter is operable to detect an occurrence of a trace data sequence corresponding to said reserved sequence in at least one of said individual trace data streams and upon detection of said reserved sequence, said formatter also being operable to modify said trace data sequence to distinguish it from said reserved sequence in said output trace data stream. Swoboda discloses receiving trace data from a plurality of sources, indicating sequence of data, which are output as a sequence or stream of packets (see column 10 lines 35-42). Swoboda further disclose a 10 bit encoding of packets, which includes opcodes that indicate the type of information being sent (see column 10 line 67 to column 11 line 1). Thus, when a sequence of data is received from a source, the sequence of data is broken up and placed in a sequence of packets, each including an opcode and at least part of the data, indicating modifying of trace data sequence to distinguish it from said reserved sequence in said trace data stream.

In regards to claim 15, Swoboda discloses a method of generating trace data, said method comprising the steps of:

generating with a plurality of trace data sources respective individual trace data streams carrying trace data. Swoboda discloses receiving conventional trace input information from a plurality of sources (see figure 2 and column 10 lines 37-40).

selecting one of said individual trace data streams as a selected trace data stream for output. Swoboda discloses producing from the plurality of sources a sequence or stream of trace packets, which are outputted to suitable output pins (see figure 2 and column 2 lines 40-46).

formatting said selected trace data stream to form an output trace data stream, wherein said formatting includes detecting which of said individual trace data sources is selected and inserting a trace data source identifier in said output trace data stream in response to a change of said selected trace data source. Swoboda discloses formatting into a stream of transmission packets which are output (see column 10 lines 44-46) and using 10 bit packets that include opcodes and/or data, wherein the opcode indicates the type of information that is being sent (see figure 2 and column 10 line 64 to column 11 line 1).

In regards to claim 16, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein said selected trace data stream includes a trace data source identifier with every packet of trace data (see column 10 line 67 to column 11 line 1).

In regards to claim 17, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein said trace data source identifier is inserted at a predetermined source identifier position within said output trace data stream. Swoboda discloses wherein opcode could be between 2 and 10 bits long, indicating wherein each of the bits constitute a

Art Unit: 2113

predetermined source identifier position (see figure 3 and column 10 line 67 to column 11 line 5).

In regards to claim 18, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein said predetermined source identifier position contains trace data when said trace data source identifier is not inserted. Swoboda discloses in packets containing less than 10 bit opcodes, the remaining bits can be used for data transmission (see figure 3 and column 11 lines 40-42).

In regards to claim 19, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein a flag at a predetermined flag position within said output trace data stream indicates whether said predetermined source identifier position contains: (i) said trace data source identifier; or (ii) trace data. Swoboda discloses different packet formats (see figure 3). From the figure, depending on whether certain bit positions, indicating a flag, are set to 1 or 0, other bit positions are identified as either a data source identifier or trace data. For instance, if either of the two left most bit positions is not set to zero, then the remaining bit positions are identified as trace data. If both of the bit positions are set to zero, then each of the next two bit positions are data source identifiers.

In regards to claim 20, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein when said predetermined source identifier position contains said trace data source identifier, then a further predetermined position within said output trace data stream contains a position flag indicating where trace data for said trace data source identified by said trace data source identifier starts within said output trace data stream. Swoboda discloses different packet formats (see figure 3). From the figure, depending on which

Art Unit: 2113

bit positions, indicating a flag, are set to 1, one can determine where the trace data starts. For instance, if the fourth bit position from the left is part of the opcode, indicating said predetermined source identifier position contains said trace data source identifier, and the third bit position from the left, indicating a flag, is set to 1, trace data starts at the fifth bit position from the left.

In regards to claim 21, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein when said trace data source identifier is not inserted, said predetermined source identifier position contains trace data and said further predetermined position contains trace data. Swoboda discloses the remaining bits that are not part of the opcode can be used for data transmission (see figure 3 and column 11 lines 40-42). Thus, when the third and fourth bits positions are not part of the opcode, indicating said trace data source identifier is not inserted, the third and fourth bit positions are trace data, indicating said predetermined source identifier position contains trace data and said further predetermined position contains trace data.

In regards to claim 22, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein said output trace data stream is formatted into data frames, each data frame comprising: a plurality of predetermined positions respectively containing one of: (i) a trace data source identifier; and (ii) trace data; and a plurality of predetermined positions containing trace data (see figure 3 and column 11 lines 37-42).

In regards to claim 23, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein each data frame includes a flags portion containing at least one of: (i) one or more position flags indicating respective start positions of trace data within said frame associated with trace data source identifiers within said data frame; and (ii) trace data.

Art Unit: 2113

Swoboda discloses different packet formats (see figure 3). From the figure, depending on whether certain bit positions, indicating flag portion, are set to 1 or 0, one can determine where the trace data starts, indicating position flags indicating respective start positions of trace data within said frame associated with trace data source identifiers within said data frame. Swoboda also discloses the remaining bits that are not part of the opcode can be used for data transmission (see figure 3 and column 11 lines 40-42). Thus, when the flag portions is are not part of the opcode, the flag portion includes trace data.

In regards to claim 24, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein a trace data source identifier having a reserved synchronisation value is inserted as a synchronisation marker within said output trace data stream (see figure 5 and 6 and column 12 lines 24-26 and 46-49).

In regards to claim 25, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein a trace data source identifier having a reserved null value is inserted as a null value marker within said output trace data stream to indicate that said output trace data stream contains null values (see figure 3 “no information” and column 19 lines 58-61).

In regards to claim 26, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein said output trace data stream is directed to one of: (i) one or more real time trace outputs of an integrated circuit; and (ii) a trace data buffer memory of an integrated circuit. Swoboda discloses transmitting the packet to a trace recorder (see figure 2 and column 10 lines 49-56).

In regards to claim 27, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein said trace data source identifier comprises a reserved

Art Unit: 2113

sequence that is distinguishable from any trace data sequences associated with said selected trace data stream in said output trace data stream. Swoboda discloses various packet formats, including reserved sequences (see figure 3 and column 11 lines 31-42).

In regards to claim 28, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein said formatting includes detecting an occurrence of a trace data sequence corresponding to said reserved sequence in at least one of said individual trace data streams and upon detection of said reserved sequence, modifying said trace data sequence to distinguish it from said reserved sequence in said output trace data stream. Swoboda discloses receiving trace data from a plurality of sources, indicating sequence of data, which are output as a sequence or stream of packets (see column 10 lines 35-42). Swoboda further disclose a 10 bit encoding of packets, which includes opcodes that indicate the type of information being sent (see column 10 line 67 to column 11 line 1). Thus, when a sequence of data is received from a source, the sequence of data is broken up and placed in a sequence of packets, each including an opcode and at least part of the data, indicating modifying of trace data sequence to distinguish it from said reserved sequence in said trace data stream.

In regards to claim 29 and 41, Swoboda discloses an apparatus and a computer program product carrying a computer program operable to control a computer to act as an apparatus for analysing trace data, said apparatus and computer program product comprising:

a trace data receiver operable to receive an output trace data stream generated by an apparatus for data processing containing a plurality of trace data sources. Swoboda discloses receiving conventional trace input information from a plurality of sources (see figure 2 and

Art Unit: 2113

column 10 lines 37-40) and a trace recorder or receiver that records the trace data stream (see column 10 lines 48-53).

a trace data parser operable to parse said output trace data stream to detect a trace data source identifier within said output trace data stream. Swoboda discloses using the opcode information to separate trace commands from other commands and timing packets (see column 13 lines 45-53). There must be a parser in order to identify the opcode from the data.

trace data mapper responsive to a detected trace data source identifier to associate trace data within said output trace data stream with a trace data source of said apparatus for data processing as indicated by said detected trace data source identifier. Swoboda discloses using the opcode information, the trace packet decoder can easily separate trace commands from other commands and timing packets (see column 13 lines 45-53).

In regards to claim 30, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein said trace data source identifier is inserted at a predetermined source identifier position within said output trace data stream when a change of trace data source occurs. Swoboda discloses using 10 bit packets that include opcodes and/or data, wherein the opcode indicates the type of information that is being sent (see figure 2 and column 10 line 64 to column 11 line 1).

In regards to claim 31, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein said predetermined source identifier position contains trace data when said trace data source identifier is not inserted. Swoboda discloses in packets containing less than 10 bit opcodes, the remaining bits can be used for data transmission (see figure 3 and column 11 lines 40-42).

In regards to claim 32, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein a flag at a predetermined flag position within said output trace data stream indicates whether said predetermined source identifier position contains: (i) said trace data source identifier; or (ii) trace data. Swoboda discloses different packet formats (see figure 3). From the figure, depending on whether certain bit positions, indicating a flag, are set to 1 or 0, other bit positions are identified as either a data source identifier or trace data. For instance, if either of the two left most bit positions is not set to zero, then the remaining bit positions are identified as trace data. If both of the bit positions are set to zero, then each of the next two bit positions are data source identifiers.

In regards to claim 33, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein when said predetermined source identifier position contains said trace data source identifier, then a further predetermined position within said output trace data stream contains a position flag indicating where trace data for said trace data source identified by said trace data source identifier starts within said output trace data stream. Swoboda discloses different packet formats (see figure 3). From the figure, depending on which bit positions, indicating a flag, are set to 1, one can determine where the trace data starts. For instance, if the fourth bit position from the left is part of the opcode, indicating said predetermined source identifier position contains said trace data source identifier, and the third bit position from the left, indicating a flag, is set to 1, trace data starts at the fifth bit position from the left.

In regards to claim 34, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein when said trace data source identifier is not inserted, said

Art Unit: 2113

predetermined source identifier position contains trace data and said further predetermined position contains trace data. Swoboda discloses the remaining bits that are not part of the opcode can be used for data transmission (see figure 3 and column 11 lines 40-42). Thus, when the third and fourth bits positions are not part of the opcode, indicating said trace data source identifier is not inserted, the third and fourth bit positions are trace data, indicating said predetermined source identifier position contains trace data and said further predetermined position contains trace data.

In regards to claim 35, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein said output trace data stream is formatted into data frames, each data frame comprising: a plurality of predetermined positions respectively containing one of: (i) a trace data source identifier; and (ii) trace data; and a plurality of predetermined positions containing trace data (see figure 3 and column 11 lines 37-42).

In regards to claim 36, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein each data frame includes a flags portion containing at least one of: (i) one or more position flags indicating respective start positions of trace data within said frame associated with trace data source identifiers within said data frame; and (ii) trace data. Swoboda discloses different packet formats (see figure 3). From the figure, depending on whether certain bit positions, indicating flag portion, are set to 1 or 0, one can determine where the trace data starts, indicating position flags indicating respective start positions of trace data within said frame associated with trace data source identifiers within said data frame. Swoboda also discloses the remaining bits that are not part of the opcode can be used for data transmission (see figure 3 and column 11 lines 40-42). Thus, when the flag portions are not part of the opcode, the flag portion includes trace data.

Art Unit: 2113

In regards to claim 37, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein a trace data source identifier having a reserved synchronisation value serves as a synchronisation marker within said output trace data stream (see figure 5 and 6 and column 12 lines 24-26 and 46-49).

In regards to claim 38, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein a trace data source identifier having a reserved null value as a null value marker within said output trace data stream indicative of said output trace data stream containing null values (see figure 3 “no information” and column 19 lines 58-61).

In regards to claim 39, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein said output trace data stream is read from one of: (i) one or more real time trace outputs of an integrated circuit; and (ii) a trace data buffer memory of an integrated circuit. Swoboda discloses transmitting the packet to a trace recorder (see figure 2 and column 10 lines 49-56).

In regards to claim 40, Swoboda discloses the claim limitations as discussed above. Swoboda further discloses wherein said trace data source identifier comprises a reserved sequence that is distinguishable from trace data originating from one of said plurality of trace data sources. Swoboda discloses various packet formats, including reserved sequences (see figure 3 and column 11 lines 31-42).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

See Form PTO-892.

Art Unit: 2113

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emerson C. Puente whose telephone number is (571) 272-3652. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W. Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink that reads "Emerson Puente". The signature is written in a cursive style with a long horizontal stroke at the end of the last name.

Emerson Puente
Examiner
AU 2113